

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 04126081 A
(43) Date of publication of application: 27.04.1992

(51) Int. Cl C12N 15/02

C12M 1/42, C12N 5/12, C12N 13/00

(21) Application number: 02284774

(22) Date of filing: 23.10.1990

(30) Priority: 20.06.1990 JP 02161964

(71) Applicant: P C C TECHNOL:KK

(72) Inventor: SAKAMOTO KAZUCHIKA
IIDA KUMIKO
KOYANO TAKASHI
FUJITA KAZUHIRO

**(54) CELL FUSION SYSTEM AND FUSED CELL
SELECTION SYSTEM**

(57) Abstract:

PURPOSE: To enable efficient, quick and pure selection of fused cell by supplying a liquid to a flow-type cell-fusion chamber to introduce cells into the chamber and applying electric stimulation to the cell.

CONSTITUTION: Two kinds of cells A and B are mixed with each other and put into a sample bottle 2 to obtain a mixed liquid 12. The liquid 12 is transferred through a liquid-feeding system 13a to a flow chamber 14 and excited with pulses generated from a pulse generator 15b, etc., and having a pulse width of $10\mu\text{-sec}$ to 10m-sec and a field strength of $\leq 2\text{kV/cm}$ to effect the cell-fusion. The fused cell 17 is transferred to a fused cell collection bottle 16 and the liquid is successively supplied to a flow cytometer 19 according to the pre-set condition. The liquid 17 and a sheath liquid flow are ejected at a high speed from the flow cytometer 19 through a small-nozzle flow-cell tip. A laser beam is radiated to the liquid flow and the scattering light, etc., generated by the cell is detected by a detector to

discriminate a heterocaryon from the other cells. The liquid droplet containing the heterocaryon is electrified, deflected and collected in the object fused cell collection bottle 20 to obtain a suspension 21 of the objective fused cell.

COPYRIGHT: (C)1992,JPO&Japio

